

REMARKS

Reconsideration and allowance of this application are respectfully requested. Claims 20--69 remain pending where claims 1-19 were previously canceled and claims 25-68 are withdrawn from consideration. By this communication, claims 20 and 21 are amended. Support for the amended subject matter can be found, for example, at lines 3-11 on page 6 of the disclosure.

As a preliminary matter, Applicant respectfully submits that although claims 25-68 are withdrawn because claim 20 is generic, Applicant reserves the right to rejoin the withdrawn claims upon allowance of claim 20.

In numbered paragraph 4 beginning on page 2 of the Office Action, claims 20-24 and 69 stand rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Frank et al.* (USP 5,871,173) in view of *Schoffl* (USP 3,861,627). Applicant respectfully traverses this rejection.

As illustrated in Figures 1-9, Applicant's embodiments are directed to a towed body 10 that includes a central body portion 12, a nose portion 14, and a tail portion 16. The central body portion 12 that includes an annular hub 18 that abuts an end of an annular slider 20. Plural blades 24 are connected to another end of the annular slider 20. Each blade 24 being pivotably mounted to the slider 20. A conical annular bumper 28 is rearward of the blades.

Applicant's claims broadly encompass the aforementioned embodiments. For example, exemplary claim 20 recites the following:

A towed body comprising:

a body portion;

a support member mounted on the body portion, the support member being movable with respect to the body portion in a generally rearward direction along a section thereof;

a plurality of forward opening blades pivotally mounted on the support member and lying adjacent the body portion in a stowed position, the blades defining a drag cone when in a fully deployed position; and

a deployment mechanism associated with the support member for causing movement in the generally rearward direction, the deployment mechanism including ramp means for deploying the blades, locking means for locking the blades in the fully deployed position, and surface means for effecting movement in the generally rearward direction based on an action of fluid, in which the towed body is stowed, on the surface means.

Applicant respectfully submits that the *Frank* and *Schoffl* patents fail to disclose or suggest every element and/or the combination of elements recited in Applicant's claims.

The *Frank* patent discloses a drag-producing device having blades 4 that are alternately mounted with blades 5 around the circumference of a slidable sleeve 6. The sleeve 6 is mounted coaxially to the main tubular body 8 of the device and slides axially relative to the body 8. The sleeve, however, is constrained to move between limits imposed by lugs 9 attached to the body and which lie in slots integrated into the sleeve 6. Moreover, the sleeve does not move in a rearward direction so that the blades can be deployed. Rather, the blades are designed so that when the airstream moving under the blades is sufficient to exert a pressure on the underside of each blade, the free end of each blade lifts to induce drag (col. 2, lines 5-47; Figs. 1a-2b).

Based on the guidance provided, the *Frank* patent fails to disclose or suggest the combination of Applicant's claimed support member that moves in a rearward direction, forward opening blades mounted on the support member, and a deployment mechanism having surface means for effecting movement in the generally rearward direction based on an action of fluid in which the towed body is stowed.

The *Schoffl* patent discloses a controllable flap unit for a rocket. This rocket includes a nose portion 1, an engine 2, and a ring 3 connected to a rear end of the engine. An axial displaceable ring 4 is attached to the end of the engine has four fins 5 that are pivotably mounted through pins 6 to the ring 4. The arrangement of the ring 4, fins 5, and pins 6 form the control flap unit for the rocket. A compression spring 8 is positioned between the displaceable ring 4 and the rocket nose 1 to force the ring 4 against the conical ring 3 (Fig. 1a; paragraph beginning at col. 1, line 56). When the rocket is launched the spring 8 pushes the ring 4 rearward with the fins 5 sliding upwardly along the conical ring 3 and displaced into the unfolded condition (Fig. 1b; col. 2, lines 6-17).

While the *Schoffl* patent discloses that a ring 4 moved rearward to displace fins, the ring is moved through the force generated by the spring. In contrast, Applicant's claim recites that the deployment mechanism includes surface means for effecting movement in the generally rearward based on an action of fluid in which the towed body is stowed. Applicant respectfully submits that the spring disclosed in the *Schoffl* patent cannot reasonably be considered to be analogous to Applicant's claimed deployment mechanism and/or surface means.

In summary, the *Frank* and *Schoffl* patents when applied individually or in the manner applied by the Examiner, fail to disclose or suggest every element and/or the combination of elements recited in Applicant's claims. For at least these reasons, a *prima facie* case of obviousness has not been established.

The Examiner is reminded that the Office has the initial burden of establishing a **factual basis** to support the legal conclusion of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in KSR Int'l v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning** to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (emphasis added). Based on the foregoing discussion, withdrawal of the rejection to claim 20 and its corresponding depending claims is respectfully requested.

Conclusion

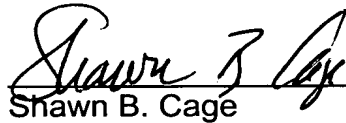
Based on the foregoing amendments and remarks, Applicant respectfully submits that claims 20-24 and 69 along with non-elected claims 25-68 are allowable and this application is in condition for allowance. In the event any issues remain, the Examiner is invited to contact then undersigned.

Respectfully submitted,

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